BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 3: e36981
doi: 10.3897/biss.3.36981

OPEN ACCESS

Conference Abstract

The Problem of Stratigraphical Time Grouping of Earth Science Data

Björn Kröger‡, Kari Lintulaakso‡

‡ Finnish Museum of Natural History, Helsinki, Finland

Corresponding author: Björn Kröger (bjorn.kroger@helsinki.fi)

Received: 07 Jun 2019 | Published: 18 Jun 2019

Citation: Kröger B, Lintulaakso K (2019) The Problem of Stratigraphical Time Grouping of Earth Science Data. Biodiversity Information Science and Standards 3: e36981. https://doi.org/10.3897/biss.3.36981

Abstract

An essential aspect of earth science data is the age they represent. The age, in most cases, is not a simple time stamp measured in years, but often specified as a stratigraphic interval or unit. Numerous schemes exist for age attribution in geological data, referring to various methods of e.g. biostratigraphy, chronostratigraphy, sequence-stratigraphy, magnetostratigraphy. Furthermore, opinions about the relationships between the stratigraphical units differ from author to author and are in a steady historical flux. New stratigraphic units become established and old ones are abandoned. This is a challenge for databases that rely on fixed standards.

However, all stratigraphic schemes can be conceptualized as a system of unique names related by opinions and expressed in publications. A database (http://rnames.luomus.fi) linking the names of stratigraphic units with referenced (published) opinions would allow for the development of dynamic models for time grouping based on explicit algorithms. We will present and discuss our database approach to tackle this problem.

Keywords

stratigraphy, earth science collections, database

© Kröger B, Lintulaakso K. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Presenting author

Björn Kröger

Presented at

Biodiversity_Next 2019